

**IN THE SPECIFICATION:**

Please amend the paragraph set forth at Column 6, Lines 8-11 as follows:

A schematic diagram of an ultra fast quenching apparatus is shown in FIG. [[12]] 1. An enclosed axial reactor chamber 20 includes an inlet at one end (shown [[to the left]] at its upper end) and an outlet at its remaining end (shown [[to the right]] at its lower end).

Please amend the paragraph set forth in Column 10, Lines 54 – 60 (after the third equation in the column) as follows:

This equation has been used to guide the design of the nozzle diameters used in the reactors built to date. Despite the assumption for a constant value of  $\gamma$  (which is valid for an argon plasma), the equation has been quite accurate in predictions of mass flow as a function of temperature, pressure, molecular weight, and nozzle diameter compared to experimental results.

Please amend the paragraph set forth in Column 11, Lines 11-14 (after the first equation in the column) as follows:

In the last equation above,  $A^*$  is the cross-sectional area at the throat of the nozzle, and  $A$  is the cross-sectional area of the converging-diverging section at a longitudinally distant location from the throat along the reactor axis. Substituting  $T_0/T$  into the equation, it becomes

Please amend the paragraph set forth in column 12, lines 53-59 as set forth below:

The plasma reduction is based on a quasi equilibrium-temperature quench sequence in which the initiation of nucleation is controlled by passage of a heated gaseous stream through a converging-diverging nozzle geometry. Results from present system tests have shown the feasibility of the process. The powder product is extremely fine ([[20]] e.g., 20 nm).